

## CONDITIONS

1. The City of Watertown shall submit within 12 months prior to closure, a post-closure monitoring plan. The post-closure monitoring plan shall include a contingency plan for clean-up of any ground water contamination beyond the designated POP.
2. The applicant must obtain and analyze samples from the ground water monitoring system as required by this ground water discharge plan according to Section 74:54:01:06, Sampling and Analytical Techniques. Due to the potential for the introduction of contaminants from upgradient sources, the Department is requiring the use of dedicated sampling equipment in the compliance point monitoring wells to avoid cross-contamination problems. The Department also recommends the use of dedicated sampling equipment in the intermediate wells to avoid possible cross-contamination problems.
3. All samples shall be analyzed by a qualified laboratory, and a laboratory Quality Assurance/Quality Control Plan shall be submitted to the Department within six (6) months after issuance of this plan by the Board of Water Management.
4. All existing and proposed monitoring wells are to be drilled and constructed in conformance with the South Dakota Well Drilling Standards and the following criteria:
  - a. All monitoring wells shall be clearly marked with an identification code that shall not be duplicated or changed and shall correspond to the code on the approved plot plan.
  - b. All monitoring wells shall be surveyed for elevation and location by a competent person, with their location and elevation depicted on a plot plan.
  - c. The surveyed elevation point shall be clearly and permanently marked on the well casing.
  - d. All monitoring wells shall be securely capped to prevent vandalism and contamination.
  - e. All water levels shall be measured from the permanently marked surveyed measuring point to an accuracy within 0.01 foot.
  - f. All monitoring wells shall be constructed to isolate the screen from all aquifers other than the one being monitored.
5. The owner or operator of the permitted facility shall inspect each monitoring well on a monthly basis for structural integrity and/or damage. The permittee shall maintain a complete inspection record indicating dates of inspection, inspector's name, and conditions observed. These records shall be made available to the Department upon request. Failure to maintain or submit records upon request shall be a violation of the conditions of this permit.
6. If the monitor wells are damaged or are otherwise rendered inadequate for their intended purpose, the Secretary, Department of Environment and Natural Resources, shall be notified within five (5) days by oral report with confirmation in writing in thirty (30) days indicating:
  - a. Which wells were damaged or rendered inadequate for their intended use;

- b. The cause and extent of damage or the reason for the inadequacy;
  - c. If the sampling schedule as required in this permit will be violated or if the results of the sampling may become reasonably misleading;
  - d. The date that the well will again be operational. Damaged wells must be replaced or repaired within thirty (30) days after the damage has occurred. The replaced well(s) must be sampled within five (5) days after they have been installed if the sampling schedule was violated. A replacement well must meet the construction requirements as outlined in Item No. 4 of these conditions.
7. The numeric Ground Water Quality Standards, ARSD 74:54:01:04, for fluoride, nitrate-nitrogen, and nitrite shall be the permitted allowable limits maintained at the compliance monitoring points. The exceptions to the above permitted allowable limits are compliance point monitoring wells MW-11B and MW-23 which will have permitted allowable limits for nitrate of 15 ppm and 25 ppm respectively.
8. When the concentration of any permit required sampling parameter exceeds the permitted allowable limit, the permittee shall comply with the requirements of Section 74:54:02:22. In addition, in accordance with SDCL 34A-2-40A, if monitoring data indicate that ground water quality has been degraded up to one-half the permitted allowable limit, the operator shall submit to the board a preventative action plan which includes an analysis of the discharge in relation to the increasing pollutant concentrations and any preventative actions to be taken to ensure that ground water limitations will not be violated.
9. The Department is aware that there is extensive petroleum contamination in the ground water upgradient of the Watertown Wastewater Treatment Facility. In addition, the Department is also aware that portions of the facility are constructed on land currently used for agricultural purposes. As long as the City of Watertown can document that the contaminants in their monitoring wells are from the above sources, the City will be allowed to continue normal operation of the wastewater treatment facility.
10. In accordance with ARSD 74:54:02:23(4) the Department is authorized to approve technical revisions to a ground water discharge facility without the requirement of a permit modification or renewal. Such technical revisions include the following:
- a. Monitoring plans or parameters;
  - b. Plans and specifications for permitted facilities;
  - c. Reasonable changes to the quality of discharged waste;
  - d. Reasonable changes in volume of discharged waste;
  - e. Quality control and quality assurance plans;
  - f. Any other changes that will not result in the degradation of the ground water above the South Dakota Water Quality Standards.

Technical revisions must be submitted to the Department in writing. The Department shall either approve, disapprove, conditionally approve, or request additional information within 30-days after receipt.

11. The Department required that a staff gauge be maintained in the Big Sioux River directly adjacent to compliance point monitoring well MW-23. The elevation of this staff gauge must be determined using the same datum as the facility's monitoring wells. The elevation of the Big Sioux River at this point must be measured on the same schedule as the ground water monitoring wells. A January, 1995 approved technical revision moved the staff gauge to the Big Sioux River Bridge crossing north of MW-24.
12. Under certain circumstances an emergency discharge to the infiltration-percolation (I-P) lagoon system may be necessary. For the purpose of this permit an emergency discharge will be defined as a continuous discharge that has a duration of more than 24 hours. If an emergency discharge to the I-P lagoon is necessary the Department must be notified within 24 hours after the discharge has commenced.
13. The effluent from an emergency discharge must be sampled at least once for the following parameters: ammonia, cadmium, chloride, chromium, fluoride, lead, mercury, nitrate, nitrite, pH, sulfate, and total dissolved solids. Based on the results of the effluent sampling data and the I-P cell(s) where the discharge is directed a determination will be made as to which monitoring wells will be placed on an accelerated (quarterly) monitoring schedule.
14. A semi-annual report must be submitted to the Department that details any discharges to the I-P lagoon system. This report must be submitted with the semi-annual ground water monitoring data. The information that must be contained in the report is as follows:
  - a. Purpose of the discharge;
  - b. Date(s) of discharge;
  - c. Duration of discharge;
  - d. Gallons discharged;
  - e. Which I-P cells in the lagoon system received the discharge;
  - f. Analytical results of any required analyses of the discharged wastewater.
15. The renewal application for a ground water discharge plan shall become part of the plan as stated, with the exception of those items specifically added or changed in the conditions.